

REMARKS

Claims 1-11 are pending in the application, with Claims 1, 4, 6, 9 and 10 being the independent claims. Claims 1-2 and 4-10 are rejected under 35 U.S.C 102(b) as being anticipated by Barany et al. (U.S. Pub. 2002/0034166). Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barany in view of Kasavaraju (U.S. Patent No. 5,940,515).

Claims 9 and 10 are also objected to due to informalities. The Specification and Abstract are objected to due to informalities. Claims 9 and 10, the Specification and the Abstract have been amended, as set forth herein, to correct the cited informalities.

Claims 1, 4, 6 and 9 recite methods relating to more rapidly performing call setup in a mobile communication system. Claim 1 recites call setup steps performed by a mobile station (MS) interacting with a base station (BS). Claims 4, 6 and 9 recite call setup steps performed by a BS interacting with an MS and a mobile switching center (MSC). Claim 10 recites an MS apparatus for performing call setup in a mobile communication system.

Barany teaches a communications system that includes a wireless access network that is coupled to a packet-based data network. Packet-based calls may be established between an MS coupled to the wireless access network and a network endpoint coupled to the data network.

Fig. 1 of Barany fails to show a connection between a base station controller (BSC) and a MSC. This connection is not addressed because Fig. 1 and the teaching of Barany is directed to an interface with a data network where the operation of a serving GPRS support node (SGSN), a gateway GPRS support node (GGSN), a call state control function (CSCF) and a media gateway control function (MGCF) are functionally described in detail.

Fig. 3 is a signaling diagram that represents both a sequencing and direction of signaling. A signal sequence is provided from top to bottom. A signal direction is provided from the MS to the RNC and from the RNC to the MS. Fig. 3 shows simplified signaling between an MS and a

radio network controller (RNC) taken by the Examiner to be a BS or BSC, but does not show signaling to the MSC. Fig. 7 teaches signaling to the data network including the SGSN, CGSN, CSCF and MGCF, but fails to show detailed messaging between the MS and a BS and a BS (RNC) as cited in Claim 1, and between a BS and an MS and the BS and an MSC as cited in Claims 4, 6 and 9.

The Examiner further identifies specific elements of the messaging in Figs. 3 to be between the MS and the BS, and between the BS and the MSC. However, none of these signal paths are explicitly stated in Barany. Barany is addressing interfaces with the broader data network and therefore does not deal with the details of signaling between components within the mobile communications network. Although Par. [0024] of Barany recites that the SGSN can be coupled to an MSC, no details are provided about the communications between the SGSN and the MSC. Expedited signaling between the MS and a BS as recited in Claim 1, and between a BS and an MS, and the BS and an MSC as recited in Claims 4, 6 and 9 are not disclosed or suggested by Barany, and thus the failure to describe these in Barany signals does not anticipate Claims 1, 4, 6 and 9 of the present application.

Claim 1 recites, in part, transmitting to the base station an origination message that does not contain a recipient's phone number. The Examiner cites Fig. 3 and Par. [0029] and [0062] as teaching transmitting an origination message not containing a recipient's phone number via a RACH proxy message. The teaching of absence of the recipient's phone number in an origination message is nowhere to be found in the cited figure, passage or elsewhere in Barany.

The Examiner maintains that a RACH proxy message is used to transmit to the BS an origination message that does not contain a recipient's phone number. Either this signal is not shown on Fig. 3 or is represented by RACH (packet-switched code) signal 202. However, the Examiner also maintains that signal 202 also teaches the MS setting up wireless channels to the BS according to assignment information. In the signal flow diagram, signal 202 is above (occurring prior to) signal 204 that the Examiner cites as assignment of logical and physical channels. This sequence would suggest that the MS sets up a channel to the BS prior to the BS

assigning resources. This interpretation is inconsistent with the basic sequence of requesting and assigning resources.

Further, with respect to Claim 1, generally when a user completes inputting a recipient's phone number, a mobile station transmits a call request to an upper node in a mobile communication system. This process of transmitting a RACH to an RNC is disclosed in Barany. However, Claim 1 recites a different feature. More particularly, in the uncompleted status of inputting the recipient's phone number (when user starts to push any number button of the dial pad), the present invention teaches transmitting to a base station an origination message that does not contain a recipient's phone number, and then beginning a channel assignment. Next, upon completion of inputting the recipient's phone number (when the user presses a Send button), it transmits an origination continuation message containing the received recipient's phone number to the base station. Thus, the present invention can perform call setup more rapidly than the conventional method. Accordingly, the present invention has totally different from the general RACH message of the conventional method.

Based on the above, Barany does not teach the elements of 1) transmitting to the base station an origination message that does not contain the recipient's phone number and 2) upon receiving a channel assignment message from the base station, setting up wireless channels to the base station according to assignment information included in the channel assignment message. Because Barany does not teach each and every element of Claim 1, Barany does not anticipate Claim 1.

Claim 4 and 9 recite, in part, upon receiving an origination message that does not contain a recipient's phone number from the mobile station, assigning to the mobile station wireless resources and transmitting to the mobile station a channel assignment message containing the assignment information, transmitting a service request message to the mobile switching center, simultaneously assigning wireless resources to the mobile station, and transmitting a channel assignment message including the assignment information to the mobile station. The Examiner asserts that Fig. 3 and Par. [0029] and [0062] of Barany teaches transmitting an origination

message not containing a recipient's phone number via a RACH proxy message. The teaching of absence of the recipient's phone number in an origination message is nowhere to be found in the cited figure, passage or elsewhere in Barany.

Claims 4, 6 and 9 recite, in part, transmitting by the base station of a service request message to the MSC and an assignment complete message to the MSC. The teaching of transmission by a base station of a service request message and an assignment complete message to the MSC is nowhere to be found in Figs. 3 or 7 or elsewhere in Barany.

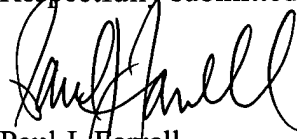
Because Barany does not teach each and every element of Claims 4, 6 and 9, Barany does not anticipate Claims 4, 6 and 9.

Claim 10 recites, in part, a controller for generating an origination message that does not contain a recipient's telephone number. The Examiner asserts that Fig. 8, which is a block diagram of the Barany apparatus, teaches a controller for generating an origination message that does not contain a recipient's phone number. Fig. 3 as cited by the Examiner and Fig. 7 (providing further details of signaling to the data network) do not show any signaling to the MSC. The teaching of absence of the recipient's phone number in an origination message is nowhere to be found in the cited figure, passage or elsewhere in Barany (as argued in response to the rejection of Claim 1). Because Barany does not teach a controller for generating an origination message that does not contain a recipient's phone number, it does not teach every element of Claim 10, and therefore does not anticipate Claim 10.

Claims 2, 3, 5, 8 and 11 which depend from the independent claims, are also not anticipated for at least the above cited reasons. Accordingly, Claims 1-11 are believed to be in condition for allowance.

Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul J. Farrell", written over the typed name.

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